Original Article

# The Effects of Inpatients' Privacy on Satisfaction

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## Abstract

Purpose: This study investigates the effects of inpatients' privacy on their satisfaction in a training and research hospital.

Methods: This cross-sectional study was designed as quantitative research using a survey method. The questionnaire was administered to 222 participants ((F=114, M=108) in a training and research hospital in Istanbul using convenience sampling. The questionnaire consisted of three parts: a socio-demographic form, the Inpatient Satisfaction Questionnaire (ISQ), and the Patient Privacy Inventory (PPI). Confirmatory factor analyses and measurement models were applied to the Inpatient Satisfaction Questionnaire and the Patient Privacy Inventory. Cronbach's Alpha, Mean Average Variance Extracted (AVE), Composite Reliability (CR) values, reliability, convergent and discriminant validity analyzes were performed before model testing. The research model examined the analysis using latent variables for the PPI scale sub-dimensions and the ISQ sub-dimensions.

Results: The care given to patient privacy explains patient satisfaction at a rate of 50%. The respect for patients' physical confidentiality, the knowledge about patients' privacy, and patients' medical confidentiality accounted for 48.65% of the physical environment, 55.43% of the physician-patient relationship, 45.55% of the patient care, and 56.38% of hospitalization and treatment process subdimensions.

Conclusions: The current study examines inpatients in a training and research hospital in Istanbul, bringing us to the conclusion that taking care of patient privacy leads to patient satisfaction. Paying attention to the patients' privacy influences patient satisfaction as high as 50%.

**Keywords:** Patient privacy, patient satisfaction, health management, health sciences.

## INTRODUCTION

Health institutions have recently adopted a quality approach to maintain their existence and to resist chancing in the competitiveness of the health sector. Parallel to this, the concept of "patient satisfaction" has gained importance as a crucial indicator of health service quality1.

Patient satisfaction can be defined as "the fulfilling of expectations of the patients or providing services beyond these" and the main outcome of health services2. Satisfied patients with positive attitudes toward their care process show an increased adherence to their treatment and post-discharge period3,4.

Privacy in healthcare includes keeping and protecting the confidentiality of personal, physical, psychological, and private affairs of patients. Patient privacy has four dimensions. (i) Physical privacy refers to bodily privacy, physical contact with individuals and the degree of intimacy in contact, and the individual's control over their private areas. (ii) Psychological privacy concerns the control over cognitive and emotional processes, the shaping of values, and the ability to maintain an individual identity. (iii) Social privacy is the management of social relationships, including the control over the relationship, its frequency, duration, and extent of interaction. (iv) Cognitive privacy is the individual's ability to control access to and disclosure of personal information5-8.

Having their expectations fulfillment, patients are satisfied, such as experiencing a quality service in a clean and safe environment respecting personal rights and establishing good communication. Patient privacy is perhaps the most important factor affecting satisfaction; therefore, patient privacy should be protected at every stage of health care. Studies point to a positive relationship between the healthcare professionals' level of knowledge about patient rights and patient satisfaction9.

However, we noticed no studies in the literature dealing with the relationship between patient privacy and satisfaction. This study aims to investigate the effect of inpatients privacy on their satisfaction in a training and research hospital.

## MATERIAL AND METHOD

### Study Design

The current study was designed as quantitative research using a cross-sectional study with survey research method.

Participants; The convenience sampling method was used to have 230 inpatients to answer the questionnaire in a training and research hospital in Istanbul between December 2021 and April 2022. Due to the insufficient answers, eight participants were excluded from the data set, leaving us with 222 participants. Ethics committee approval of the study was received from the Scientific Research Ethics Committee (dated 12.11.2021, no 21/698). The study was carried out under the Principles of the Declaration of Helsinki.

### Data Collection Tools

The questionnaire consisted of three parts, including a socio-demographic form, the Inpatient Satisfaction Questionnaire (ISQ), and the Patient Privacy Inventory (PPI). The socio- demographic form comprised of information about gender, age, education status, marital status, job, income level, and social security information of patients.

The Patient Privacy Inventory (PPI): This inventory was developed by Akten to measure knowledge about patient privacy (13 items) and respect for patients' medical confidentiality (39 items) using 2 domains and a total of 52 items. Each answer is rated from 1 to 3 in an ascending order10.

The Inpatient Satisfaction Questionnaire (ISQ): This questionnaire was developed by Yılmaz et al. having 27 items on a 5-point Likert scale. The five domains include hospitalization and treatment process (HTP), physician-patient relationship (PPR), physical environment (PE), food services (FS), and patient care (PC)11.

### Data Analysis

The data was analyzed using SPSS for Windows version 25.00 and AMOS version 24.0. Confirmatory factor analysis and measurement model confirmatory factor analysis were applied to the Inpatient Satisfaction Questionnaire and the Patient Privacy Inventory. By calculating Cronbach's Alpha, Average Variance Extracted (AVE), Composite Reliability (CR) values, reliability, convergent, and discriminant validity analyzes were performed before the model' testing. In the research model, the analysis was examined using latent variables for the PPI scale sub-dimensions and the ISQ sub-dimensions.

## RESULTS

### Demographic Characteristics

The majority of the 222 participants were women (F=114, M=108), and nearly half of them were between 30 and 50 years of age. High school and university graduates accounted for 69%. About 68% were hospitalized in surgery clinics. Most of the participants (87%) had no knowledge about patient privacy. We asked the patients what satisfied them most in the hospital. To which 61% of them answered "a friendly manner" and "the staff and doctors' care".

Table 1. Percentage distribution of the demographic characteristics of the participants (n=222).

| Variables | Groups | n | % |
|---|---|---|---|
| Gender | Female | 114 | 51,4% |
| | Male | 108 | 48,6% |
| Age groups | < 20 years | 11 | 5,0% |
| | 21-30 years | 43 | 19,4% |
| | 31-40 years | 56 | 25,2% |
| | 41-50 years | 57 | 25,7% |
| | 51-60 years | 32 | 14,4% |
| | ≥ 61 years | 23 | 10,4% |
| Marital Status | Married | 133 | 60,2% |
| | Single | 88 | 39,8% |
| Education status | Illiterate | 6 | 2,7% |
| | Literate | 17 | 7,7% |
| | Primary school | 38 | 17,1% |
| | High school | 86 | 38,7% |
| | Undergraduate | 68 | 30,6% |
| | Graduate | 7 | 3,2% |
| Income | 0-2999 TL | 84 | 37,8% |
| | 3000-5999 TL | 52 | 23,4% |
| | 6000-8999 | 50 | 22,5% |
| | 9000-11999 | 25 | 11,3% |
| | ≥15000 TL | 11 | 5% |
| Employment Status | Unemployed | 59 | 26,6% |
| | Government employee | 45 | 20,3% |
| | Retired | 18 | 8,1% |
| | Worker | 40 | 18,0% |
| | Entrepreneur | 32 | 14,4% |
| | Farmer | 10 | 4,5% |
| | Others | 18 | 8,1% |
| Surveyed clinics | Surgery | 151 | 68,0% |
| | Internal medicine | 50 | 22,5% |
| | Other clinics | 21 | 9,5% |
| Are you informed about the regulations? | Yes | 33 | 14,9% |
| | No | 189 | 85,1% |
| Are you informed about the patient privacy? | Yes | 28 | 12,6% |
| | No | 194 | 87,4% |
| What satisfied you the most in the hospital? | Friendly manners | 67 | 30,2% |
| | The staff and doctors' care | 68 | 30,6% |
| | Being informed about surgery before the operation | 45 | 20,3% |
| | Good post-operative care | 28 | 12,6% |
| | Quiet and clean patient room | 7 | 3,2% |
| | Others | 3 | 1,4% |
| | All of them | 4 | 1,8% |

Confirmatory and Explanatory Factor Analysis in the Patient Privacy Inventory

The Patient Privacy Inventory has no explanatory factor analysis in the literature; therefore, an explanatory factor analysis was carried out in the current study.

Table 2. Explanatory Factor Analysis of the Patient Privacy Inventory

| Dimensions | Items | FL | VE |
|---|---|---|---|
| Respect for patient's medical confidentially (RPMC) | Nobody should interfere with my personal and family life unless the nature of my illness requires it. | ,669 | 13,43 |
| | My hospital room was arranged in a way that other patients and attendants did not hear the information about my health while it was being disclosed to me. | ,808 | |
| | The toilets in the hospital were separate for men and women. | ,664 | |
| | While the nurses were giving each other information about me, the other patients in my room did not hear what was said. | ,643 | |
| | I had a locker where I could put my clothes and personal belongings. | ,624 | |
| | While I was under medical treatment, there were no patients or their relatives in the room, except for the healthcare workers. | ,607 | |
| | During my stay, the file containing my health information was attached to my bed and was visible to everyone. | ,579 | |
| | Visiting hours and rules were explained to me and other patients. | ,554 | |
| Respect for patient's physical confidentiality (RPPC) | I was able to change my clothes in my room without the violation of my privacy. | ,802 | 13,32 |
| | The clothes I was wearing when I was in the X-ray room ensured my privacy. | ,712 | |
| | My hospital room was arranged so that other patients and attendants could not see me while I was being treated. | ,712 | |
| | Visiting hours were arranged and monitored. | ,673 | |
| | The visitors were informed of the things that they should pay attention to. | ,614 | |
| | In the clinic, there was a bathroom that I could use without violating my privacy. | ,600 | |
| Health professionals' introducing yourself to patient (HPİP) | Doctors introduced themselves before any kind of medical intervention. | ,841 | 12,75 |
| | Allied health personnel introduced themselves before any kind of medical intervention. | ,812 | |
| | Employees were wearing ID cards. | ,780 | |
| | Employees' ID cards could be read from distance. | ,698 | |

| | | | |
|---|---|---|---|
| | The medical staff asked permission before entering my room with the door closed. | ,516 | |
| Total | | | %84,72 |

KMO:,779 Bartlet's test p value p<0,00 VE:variance explained FL:factor loading Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 9 iterations

In PPI, 27 out of 52 items were excluded from the analysis because the factor load (FY<0.50) was low. The remaining 25 items had 4 dimensions. The total variance explanatory rate of the scale was determined as 56.8%. There are seven items concerning knowledge about patient privacy (KAPP), seven items about respect for patient's medical confidentiality (RPMC), six items concerning respect for patient's physical confidentiality (RPPC), and five items about health professionals' introducing themselves to the patient (HPIP). Bartlet's test (p<0.05), which is an indicator of the feasibility of factor analysis, and the Kaiser Meier Olkin (KMO) value (.779), indicating the suitability of the data set for analysis, was suitable.

In the confirmatory factor analysis of the privacy scale, all 25 items were included. In the analysis, the standard factor loads were among the values (.55; .95).

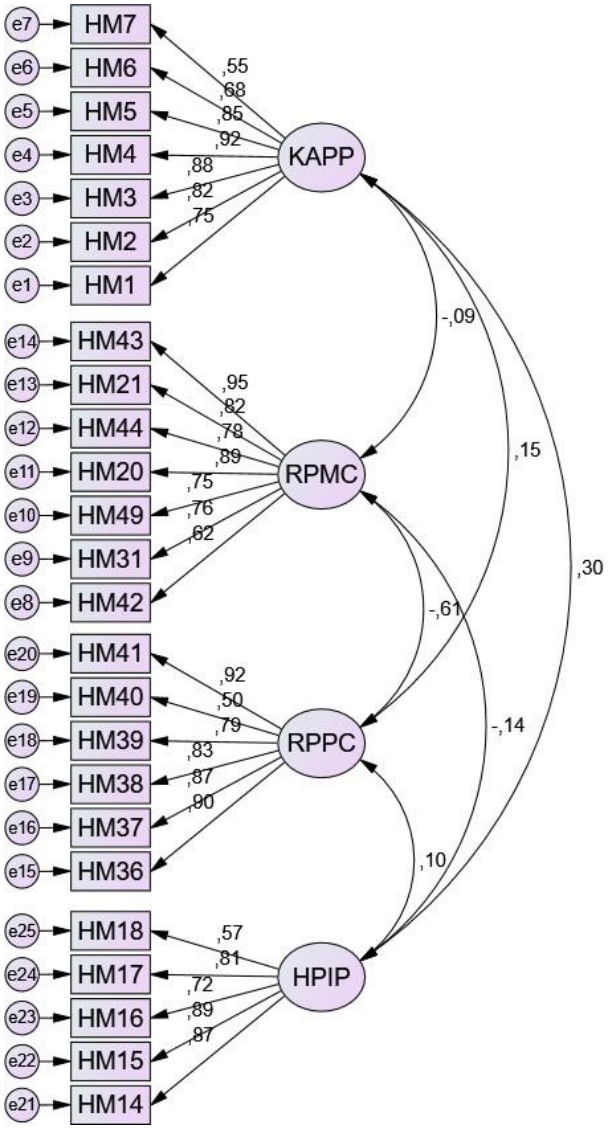


Figure 1. Confirmatory factor analysis of the Patient Privacy Inventory

In factor analysis, model fit indices ($p<0.05$), including x2 (737.34), x2/df (2.741), GFI (.919), CFI (.931), SRMR (.0693, RMSEA (.0714) values were within acceptable limits.

Table 3. The Confirmatory Factor Analysis in The Patient Privacy Inventory

| Sub-dimensions | Items | Standard Estimate | C.R. | P |
|---|---|---|---|---|
| KAPP | HM1 | ,755 | | |
| KAPP | HM2 | ,819 | 12,825 | *** |
| KAPP | HM3 | ,876 | 13,876 | *** |
| KAPP | HM4 | ,917 | 14,622 | *** |
| KAPP | HM5 | ,852 | 13,422 | *** |
| KAPP | HM6 | ,677 | 10,321 | *** |
| KAPP | HM7 | ,550 | 8,216 | *** |
| RPMC | HM42 | ,620 | | |
| RPMC | HM31 | ,760 | 9,479 | *** |
| RPMC | HM49 | ,753 | 9,411 | *** |
| RPMC | HM20 | ,887 | 10,568 | *** |
| RPMC | HM44 | ,778 | 9,641 | *** |
| RPMC | HM21 | ,824 | 10,053 | *** |
| RPMC | HM43 | ,949 | 11,022 | *** |
| RPPC | HM36 | ,902 | | |
| RPPC | HM37 | ,872 | 19,228 | *** |
| RPPC | HM38 | ,826 | 17,113 | *** |
| RPPC | HM39 | ,785 | 15,526 | *** |
| RPPC | HM40 | ,496 | 7,943 | *** |
| RPPC | HM41 | ,924 | 22,135 | *** |
| HPIP | HM14 | ,875 | | |
| HPIP | HM15 | ,892 | 17,513 | *** |
| HPIP | HM16 | ,719 | 12,483 | *** |
| HPIP | HM17 | ,813 | 15,128 | *** |

| | | | | |
|---|---|---|---|---|
| HPIP | HM18 | ,570 | 9,103 | *** |

***p<0,001 **p<0,01 *p<0,05

In the confirmatory factor analysis in the Patient Privacy Inventory, the significance levels of all items were at (p<0.001), which are shown in table 3.

Factor Analysis of Inpatient Satisfaction Questionnaire (ISQ)

In the confirmatory factor analysis, out of 22 items the standard factor loadings of 18 were (FY>0.50), and only four were (FY<0.50). Therefore, the 10th, 12th, 18th, and 21st item of the scale were eliminated from the analysis. Factor loading of 18 items were within the range 0.61- 0.94.

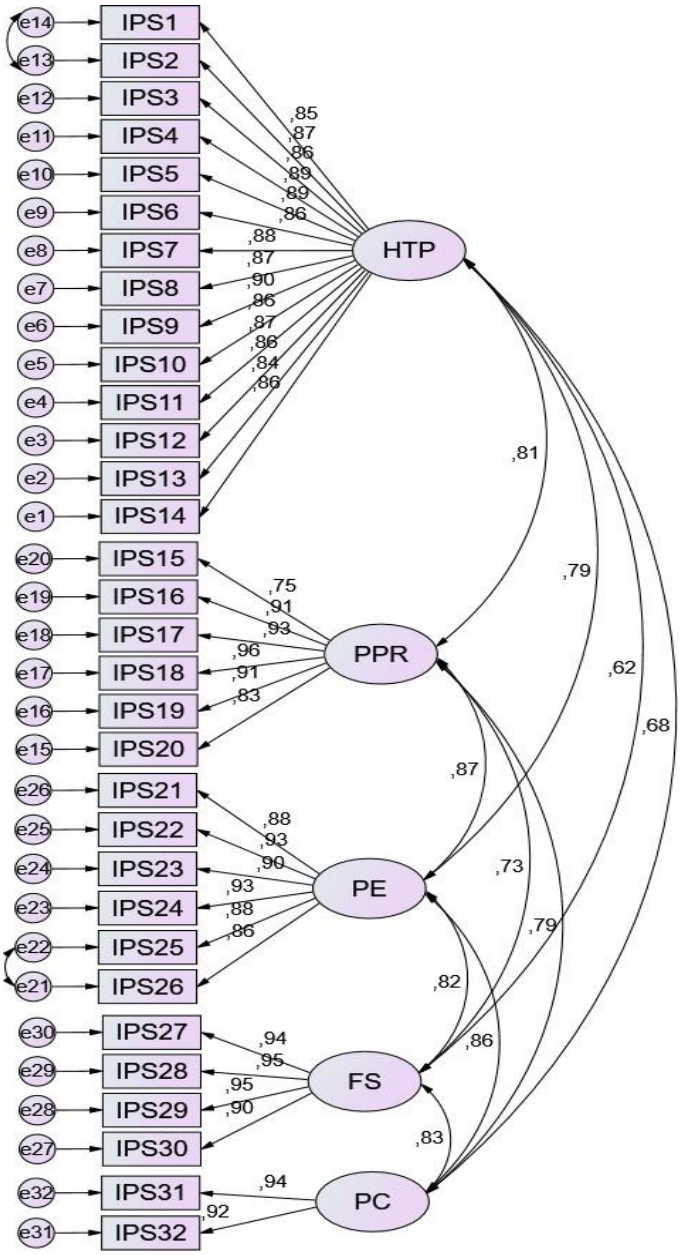


Figure 2. Confirmatory factor analysis of Inpatient Satisfaction Questionnaire

The confirmatory factor analysis was considered significant since the model fitting values x2 and x2/df were found as 1309.8 and 2.95 ($p<0.05$). Since the fitting indexes of model [GFI (0,905), CFI (0,918), SRMR (0,0645), RMSEA (0,0778)] were within the acceptable range, the confirmatory factor analysis was considered valid for ISQ.

Table 5. Confirmatory factor analysis of Inpatient Satisfaction Questionnaire

| Sub-dimensions | | Items | Estimate | C.R. | P |
|---|---|---|---|---|---|
| HTP | □ | IPS14 | ,855 | | |
| HTP | □ | IPS13 | ,841 | 18,614 | *** |
| HTP | □ | IPS12 | ,855 | 17,039 | *** |
| HTP | □ | IPS11 | ,875 | 17,776 | *** |
| HTP | □ | IPS10 | ,858 | 18,490 | *** |
| HTP | □ | IPS9 | ,901 | 18,862 | *** |
| HTP | □ | IPS8 | ,866 | 17,462 | *** |
| HTP | □ | IPS7 | ,877 | 17,877 | *** |
| HTP | □ | IPS6 | ,862 | 17,298 | *** |
| HTP | □ | IPS5 | ,890 | 18,398 | *** |
| HTP | □ | IPS4 | ,890 | 18,386 | *** |
| HTP | □ | IPS3 | ,865 | 17,392 | *** |
| HTP | □ | IPS2 | ,865 | 17,416 | *** |
| HTP | □ | IPS1 | ,853 | 16,947 | *** |
| PPR | □ | IPS20 | ,832 | | |
| PPR | □ | IPS19 | ,910 | 18,131 | *** |
| PPR | □ | IPS18 | ,964 | 20,202 | *** |
| PPR | □ | IPS17 | ,932 | 18,942 | *** |
| PPR | □ | IPS16 | ,907 | 18,018 | *** |
| PPR | □ | IPS15 | ,751 | 13,278 | *** |
| PE | □ | IPS26 | ,856 | | |
| PE | □ | IPS25 | ,877 | 24,532 | *** |
| PE | □ | IPS24 | ,926 | 19,915 | *** |
| PE | □ | IPS23 | ,900 | 18,751 | *** |
| PE | □ | IPS22 | ,926 | 19,909 | *** |
| PE | □ | IPS21 | ,877 | 17,821 | *** |
| FS | □ | IPS30 | ,905 | | |
| FS | □ | IPS29 | ,946 | 24,915 | *** |
| FS | □ | IPS28 | ,953 | 25,560 | *** |
| FS | □ | IPS27 | ,939 | 24,391 | *** |
| PC | □ | IPS32 | ,917 | 23,124 | *** |
| PC | □ | IPS31 | ,938 | | |

***p<0,001 **p<0,01 *p<0,05

All items assessed in confirmatory factor analysis were found to be <0.001. Table 5 presents detailed data about confirmatory factor analysis.

Measurement model confirmatory factor analysis and reliability analysis

As composite reliability (CR) coefficients were >0.70, the composite reliability was considered sufficient12. In addition, the Mean Variance Explained (MVE) values were found as >0.50, the MVE was at the desired level for each dimension.

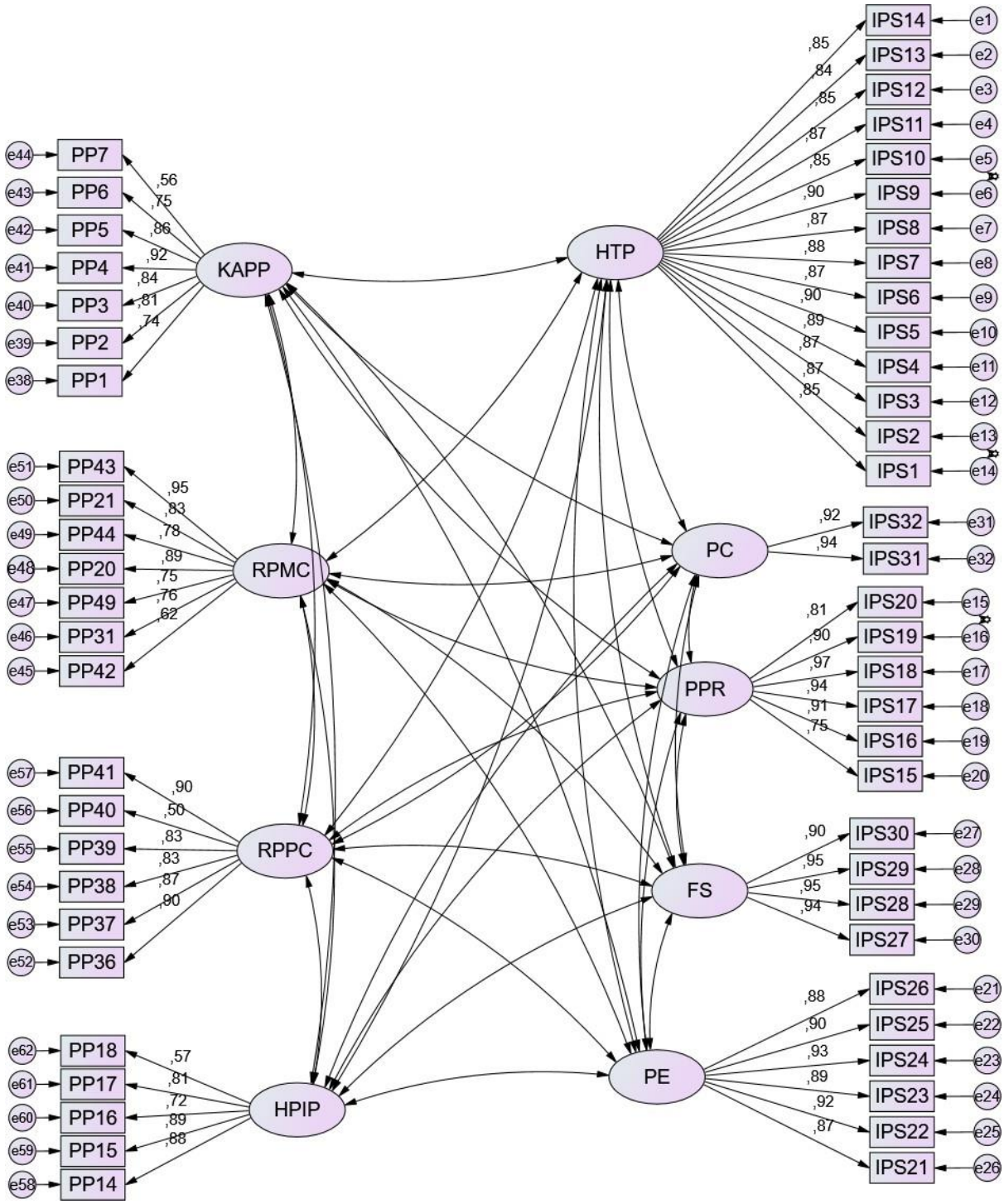


Figure 3. Measurement model confirmatory factor analysis.

The confirmatory factor analysis was considered significant since the model fitting values x2 and x2/df were found as 3540.88 and 2.0052 ($p<0.05$). Since the fitting indexes of model [GFI (0,909), CFI (0,934), SRMR (0,0612), RMSEA (0,0790)] were within the acceptable range, the confirmatory factor analysis was considered valid for the scale.

Table 6. Measurement model confirmatory factor analysis

| **Sub-dimensions** | | **Items** | **Standard Estimate** | **C.R.** | **P** |
|---|---|---|---|---|---|
| HTP | | IPS11 | ,869 | 17,406 | *** |
| HTP | | IPS10 | ,854 | 18,243 | *** |
| HTP | | IPS9 | ,898 | 18,511 | *** |
| HTP | | IPS8 | ,865 | 17,256 | *** |
| HTP | | IPS7 | ,877 | 17,676 | *** |
| HTP | | IPS6 | ,870 | 17,432 | *** |
| HTP | | IPS5 | ,899 | 18,553 | *** |
| HTP | | IPS4 | ,894 | 18,373 | *** |
| HTP | | IPS3 | ,867 | 17,292 | *** |
| HTP | | IPS14 | ,851 | | |
| HTP | | IPS13 | ,839 | 18,509 | *** |
| HTP | | IPS12 | ,853 | 16,812 | *** |
| HTP | | IPS1 | ,854 | 16,841 | *** |
| HTP | | IPS2 | ,867 | 17,328 | *** |
| PPR | | IPS20 | ,814 | | |
| PPR | | IPS19 | ,902 | 21,340 | *** |
| PPR | | IPS18 | ,965 | 19,107 | *** |
| PPR | | IPS17 | ,938 | 18,187 | *** |
| PPR | | IPS16 | ,910 | 17,259 | *** |
| PPR | | IPS15 | ,749 | 12,874 | *** |
| PE | | IPS26 | ,879 | | |
| PE | | IPS25 | ,896 | 19,820 | *** |
| PE | | IPS24 | ,930 | 21,692 | *** |
| PE | | IPS23 | ,889 | 19,501 | *** |
| PE | | IPS22 | ,915 | 20,832 | *** |
| PE | | IPS21 | ,870 | 18,585 | *** |
| FS | | IPS30 | ,905 | | |
| FS | | IPS29 | ,945 | 24,896 | *** |
| FS | | IPS28 | ,953 | 25,590 | *** |
| FS | | IPS27 | ,939 | 24,362 | *** |

| | | | | | |
|---|---|---|---|---|---|
| PC | | IPS32 | ,916 | 23,267 | *** |
| PC | | IPS31 | ,940 | | |
| KAPP | | PP2 | ,809 | 15,986 | *** |
| KAPP | | PP3 | ,844 | 16,186 | *** |
| KAPP | | PP4 | ,918 | 20,793 | *** |
| KAPP | | PP5 | ,864 | 18,235 | *** |
| KAPP | | PP6 | ,746 | | |
| KAPP | | PP7 | ,564 | 9,263 | *** |
| KAPP | | PP1 | ,745 | 13,837 | *** |
| RPMC | | PP42 | ,619 | 10,053 | *** |
| RPMC | | PP31 | ,759 | 13,181 | *** |
| RPMC | | PP49 | ,754 | 13,067 | *** |
| RPMC | | PP20 | ,886 | 16,746 | *** |
| RPMC | | PP44 | ,778 | 13,670 | *** |
| RPMC | | PP21 | ,826 | | |
| RPMC | | PP43 | ,948 | 18,736 | *** |
| RPPC | | PP36 | ,901 | 22,793 | *** |
| RPPC | | PP37 | ,875 | 20,979 | *** |
| RPPC | | PP38 | ,828 | 18,270 | *** |
| RPPC | | PP39 | ,829 | 18,760 | *** |
| RPPC | | PP40 | ,597 | 8,073 | *** |
| RPPC | | PP41 | ,903 | | |
| HPIP | | PP14 | ,880 | 18,138 | *** |
| HPIP | | PP15 | ,889 | | |
| HPIP | | PP16 | ,717 | 13,424 | *** |
| HPIP | | PP17 | ,813 | 17,038 | *** |
| HPIP | | PP18 | ,568 | 9,436 | *** |

***p<0.001 **p<0.01 *p<0.05 Std.Est: Standard regression coefficient, C.R.: Critical table value P: Probability

Table 6 shows that all items in measurement model confirmatory factor analysis were found to be >0.001.

Table 7. Reliability values of the subdimensions of the scales

| Dimension | KAPP | RPMC | RPPC | HPIP | HTP | PC | PPI | CS | PE |
|---|---|---|---|---|---|---|---|---|---|
| **KAPP** | **(,791)** | | | | | | | | |
| **RPMC** | -,118 | (,801) | | | | | | | |
| **RPPC** | ,157* | -,616** | (,828) | | | | | | |
| **HPIP** | ,326** | -,156* | ,128 | (,787) | | | | | |
| **HTP** | ,221** | ,134* | -,037 | ,094 | (,866) | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PC** | ,221** | ,244** | -,134* | ,012 | ,652** | (,893) | | | |
| **PPR** | ,164* | ,193** | -,090 | ,030 | ,834** | ,761** | (,882) | | |
| **FS** | ,138* | ,218** | -,080 | -,036 | ,603** | ,789** | ,711** | (,933) | |
| **PE** | ,201** | ,195** | -,084 | -,017 | ,770** | ,718** | ,761** | ,795** | (,896) |
| **Alpha** | ,918 | ,901 | ,965 | ,876 | ,964 | ,910 | ,912 | ,945 | ,911 |
| **CR** | ,927 | ,925 | ,928 | ,885 | ,970 | ,895 | ,955 | ,976 | ,961 |
| **AVE** | ,627 | ,643 | ,687 | ,612 | ,751 | ,798 | ,779 | ,871 | ,804 |

***p<0.001 **p<0.01 *p<0.05 KAPP: Knowledge about patient privacy; RPMC: Respect for patient's medical confidentiality; RPPC: Respect for patient's physical confidentiality; HPIP: Health professionals' introducing yourself to patient; HTP: Hospitalization and Treatment Process; PC: Patient Care; PPR: Physician Patient Relationship; FS: Food services; PE: Physical Environment.

Cronbach's alpha reliability scores of sub-dimensions of Patient Privacy Inventory were found as .918 for knowledge about patient privacy (KAPP), .901 for patient's medical confidentiality (RPMC), .965 for patient's physical confidentiality (RPPC), and .876 for health professionals' introducing themselves to patient (HPIP). Cronbach's alpha reliability scores of sub-dimensions of Inpatient Satisfaction Scale were found as .964 for hospitalization and treatment Process (HTP), .910 for Patient Care (PC), .912 for Physician Patient Relationship (PPI), .945 for Food services (FS), and .911 for Physical Environment (PE). As composite reliability (CR) coefficients were >0.70, the composite reliability was considered sufficient. In addition, the Mean Variance Explained (MVE) values were found as >0.50. The MVE was at the desired level for each dimension.

Path Analysis Model with Observed Variables

Before the research model test, the mean and standard deviation values of all the variables that make up the model and the correlations between the variables were calculated using the SPSS 25.0 program. The research model shown in Figure 4 was tested through the AMOS program version 24.0 using path analysis with observed variables13.

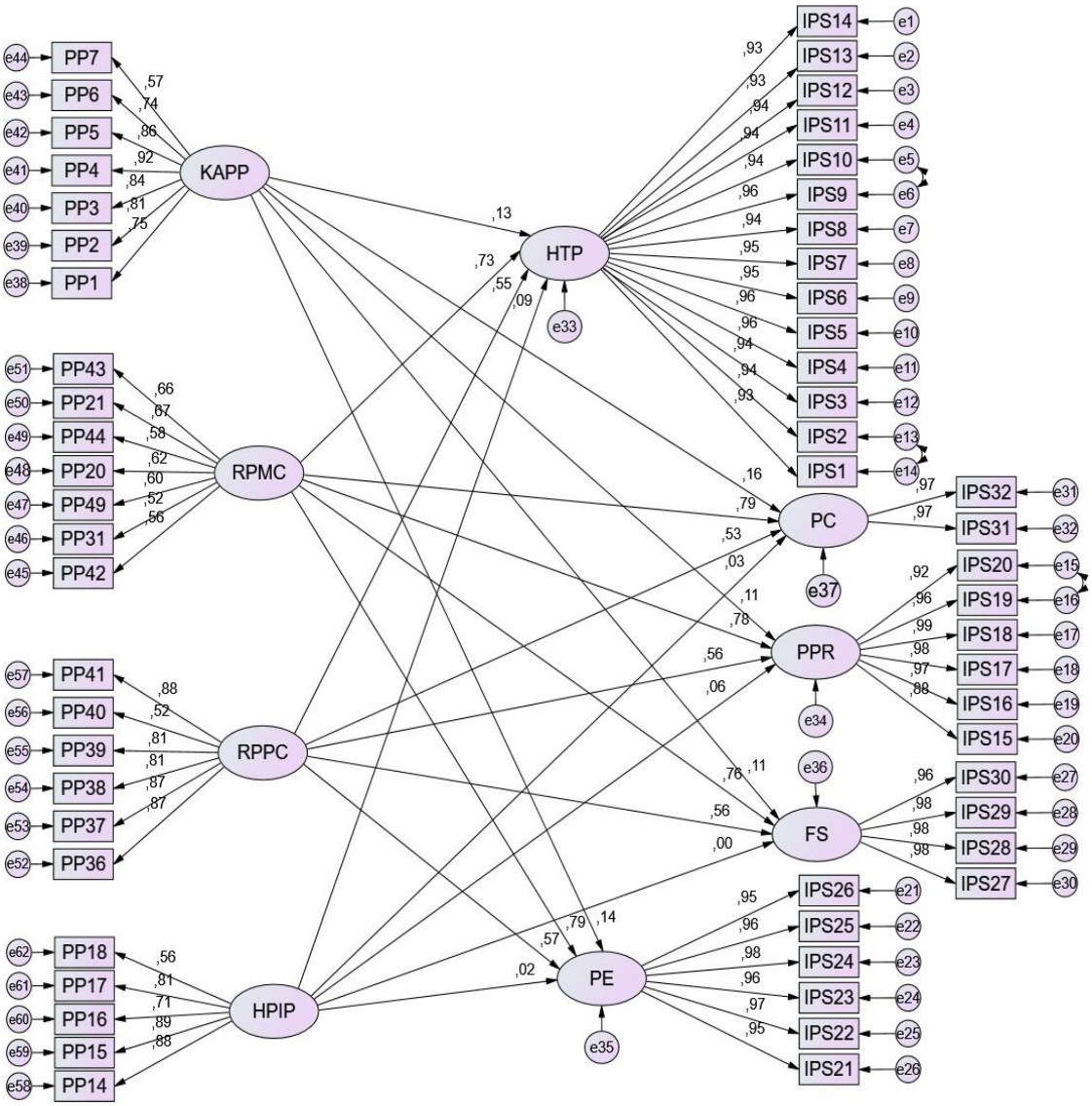


Figure 4. Regression model for path analysis with latent variables

Since model test values were x2 (4521.35) and x2/df (2.994) in path analysis with latent variables ($p<0.05$), the analysis was found to be statistically significant. As model fit index values including GFI (0.902), CFI (0.921), SRMR (0.0785), and RMSEA (0.0755) were within acceptable limits, this model proved to be valid.

Table 8. Regression coefficient values obtained from the model

| PPI sub-dimensions | | ISQ sub-dimensions | Standard Estimate | CR | P |
|---|---|---|---|---|---|
| RPPC | → | PE | ,572 | 16,188 | *** |
| RPPC | → | PPR | ,561 | 14,564 | *** |
| RPMC | → | FS | ,761 | 11,668 | *** |
| RPMC | → | PC | ,789 | 12,003 | *** |
| KAPP | → | PPR | ,111 | 3,376 | *** |
| RPMC | → | PPR | ,776 | 11,566 | *** |
| HPIP | → | PPR | ,058 | 1,762 | ,078 |

| | | | | | |
|---|---|---|---|---|---|
| HPIP | → | PE | ,022 | ,708 | ,479 |
| KAPP | → | FS | ,107 | 3,086 | ,002 |
| HPIP | → | FS | ,003 | ,077 | ,939 |
| RPPC | → | FS | ,556 | 14,444 | *** |
| HPIP | → | PC | ,033 | ,968 | ,333 |
| RPPC | → | PC | ,531 | 14,415 | *** |
| KAPP | → | PC | ,161 | 4,691 | *** |
| KAPP | → | PE | ,143 | 4,641 | *** |
| RPMC | → | PE | ,785 | 12,078 | *** |
| HPIP | → | HTP | ,092 | 2,499 | ,012* |
| KAPP | → | HTP | ,132 | 3,630 | *** |
| RPMC | → | HTP | ,733 | 11,186 | *** |
| RPPC | → | HTP | ,553 | 13,509 | *** |

***p<0.001 **p<0.01 *p<0.05

In the research model, the effect of the Patient Privacy Inventory's (PPI) sub-dimensions on the Inpatient Satisfaction Questionnaire's (ISQ) sub-dimensions was examined. The significance levels of the regression effect values obtained from the model are given in Table 8.

- As the sub-dimension of the ISQ, the Physical Environment variable is positively affected by several things: the respect for patients' physical confidentiality variable (β=.572; p<.05), the knowledge about patient privacy variable (β) =.143; p<.05), the respect for patients' medical confidentiality variable (β=.785; p<.05). With all these effects, 48.65% of the Physical Environment variable could be explained.

- The physician patient relationship variable, as the sub-dimension of the ISQ, is positively affected by various things: the respect for patients' physical confidentiality variable (β=.561; p<.05), the knowledge about patient privacy variable (β=.111; p<.05), patients' medical confidentiality variable (β=.776; p<.05). With all these effects, 55,43% of the physician patient relationship variable could be explained.

- As the sub-dimension of the inpatient satisfaction scale, food services variable is positively affected by several things: respect for patients' physical confidentiality variable (β=.556; p<.05), the knowledge about patient privacy variable (β=.107; p<.05), respect for patients' medical confidentiality variable (β=.761; p<.05). With all these effects, 54.98% of the food services variable could be explained.

- Patient Care variable, as the sub-dimension the inpatient satisfaction scale, is positively affected by following things: the respect for patients' physical confidentiality variable (β=.531; p<.05), the knowledge about patient privacy variable (β=.161; p<.05), and the respect for patient's medical confidentiality variable (β=.789; p<.05). With all these effects, 45.55% of the Patient Care variable could be explained.

- As the sub-dimension of the inpatient satisfaction scale, hospitalization and treatment process variable is positively affected by several things: the respect for patients' physical confidentiality variable (β=.553; p<.05), the knowledge about patient privacy variable (β=.132; p<.05), the respect for patient's medical confidentiality variable (β=.733; p<.05), and the health professionals' introducing themselves to patient variable (β=.0920; p<.05). With all these effects, 56.38% of the Patient Care variable could be explained.

- In addition to this model, when the effect of the Patient Privacy Inventory (PPI) total value on Inpatient Satisfaction Questionnaire (ISQ) total value was examined with the simple SEM regression model with latent variables, a positive and significant (β=.151; p<.05) regression value was found, and the explanation rate was 50%. It was determined to be .10. As a total criterion, patient privacy has a positive effect on patient satisfaction and 50.10% of the patient satisfaction criterion is due to patient privacy.

## DISCUSSION

This study aimed to investigate the effect of inpatients privacy on their satisfaction in a training and research hospital in Istanbul.

The most important result of this research is that the care given to patient privacy explains the patient satisfaction at a rate of 50%. A previous study stated that the crucial factors affecting satisfaction of inpatients are communication and patient safety culture, communication of healthcare professionals, information about procedures, and the safety and cleanliness of the hospital. The result of our study made a significant additional contribution by revealing that patient privacy is also an essential factor14.

Female patients are more sensitive about privacy, communication, and information, a set of information which supports our study15. Confidentiality is essential for patient satisfaction among the environmental factors affecting patient satisfaction, supporting our study result16.

Yavuz (2003) stated that one of the factors increasing patient satisfaction is giving importance to patient information confidentiality, which is the same line with our results17. The study conducted by Ekinci found that respect for patient privacy leads to patients' trust18. In addition, environmental factors, the sub-dimension of patient satisfaction, are essential for patient privacy, which are parallel with our results.

## CONCLUSION

The current study was conducted on inpatients in a training and research hospital in Istanbul, and it was found that taking care of patient privacy leads to patient satisfaction. Paying attention to the patients' privacy affects patient satisfaction at a rate as high as 50%.

Future studies should evaluate patient privacy regarding particular privacy issues such as privacy in post-operative care and intensive care units, the privacy of information security, etc. It should not be forgotten that the privacy provided in health institutions will increase the patients' satisfaction levels. Healthcare professionals should be trained on patient privacy. In addition to quantitative studies in these specific areas, qualitative studies should also be conducted, and an in-depth examination of the subject will contribute to the literature.

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